

### **REMARKS**

Applicants' attorney thanks the Examiner for the careful consideration given to this application. The declaration of co-inventor Peter Steinrücke is submitted as a part of this response.

Claim 32 has been further restricted to a topical body care product comprising porous particles in a carrier material as disclosed throughout the specification and particularly referenced at page 11, original claim 29, and prior claim 72, *inter alia*. For the reasons set forth below, all of the pending claims are distinguished over the prior art. Withdrawn claim 51 contains all the limitations of claim 32, and claims 51-70 also read on the elected species and rejoinder of claims 51-70 is requested.

The Steinrücke Declaration demonstrates the unexpected improvements provided by the claimed topical body care product and topical treatment using the same. More particularly, the claimed particles have been found to be especially effective as topical body care products and are claimed in combination with topical carriers to enable topical application to skin and/or mucosa to treat infection and/or inflammation. The claimed particles tend to act on only the outer skin layers to thereby provide a

purely topical treatment while concurrently providing porosity enhanced source of silver ions at this first and preferred location for fighting foreign bacteria. These unexpected and important properties of the particles are at least in-part based on applicants' discovery the particle size and construction inhibit particle penetration of the deeper layers of skin while providing levels of silver ions adequate for effective antimicrobial treatment. The claimed particles are thereby particularly distinguished from nanoparticles as described in the Steinrücke Declaration in greater detail.

It is requested that the Examiner reconsider and withdraw the rejection of claim 32-45, 47-50 under 35 USC 102(b) as being anticipated by Bechert (WO 02/17984) using US 6,984,392 as a translation. Bechert does not disclose a topical body care product in a carrier material for application to skin and/or mucosa for topical treatment of infection. Bechert fails to teach each and every limitation of claim 32 and therefore Bechert cannot anticipate such claim or the claims that depend therefrom.

It is requested that the Examiner reconsider and withdraw the rejection of claims 32-50 under 35 USC 103(a) as being unpatentable over Bechert in view of US 6,720,006

to Hanke. There is no basis for the proposed combination of teachings, and even if combined, they do not result in the claimed invention.

Bechert's porous aggregates are used in implants and coatings on medical devices. To that end, Bechert teaches that his coatings may be applied to inanimate materials, such as a material implanting in bones or a coating of medical products or devices, and never suggests a topical medicament. Practical considerations dictate against such an interpretation of Bechert since the particles are difficult and expensive to make so as to preclude their mere incorporation in a topical cream product. This is confirmed in the Steinrücke Declaration. Thus, the unsupported mere possibility of particle use is not obvious and not motivated by the prior art teachings.

Again, reference is made to detailed arguments presented in the September 10, 2010 amendment as to the lack of motivation to combine Bechert and Hanke which employs nanoparticles. These arguments are maintained and further supported by the Steinrücke Declaration.

Applicants further maintain that Bechert and Hanke fail to teach treatment of infection. This deficiency is further emphasized by the present limitation of the claims

to the carrier material containing particles in an amount sufficient to treat an infection as a topical medicament. The teaching in Bechert is that the aggregates of silver particles in the matrix material prevent the growth of microorganisms in the material, such that the implanted material does not become the source of microorganisms that may cause infection of the patient. That is, Bechert is directed to preventing infection in implants and the like, not treating infection by means of a body care product for application to skin and/or mucosa. Bechert does not disclose a method of treatment of the patient, but only a method to keep the material to be implanted free of microorganisms. This prophylaxis teaching does not suggest a composition useful for the treatment of an existing infection.

In a like manner, Hanke teaches a prophylaxis treatment. As previously argued, Hanke teaches a prophylaxis use of his particles and the prior arguments are maintained. Further, Hanke observes in column 5, lines 34-36 that the infection is an infection of the cosmetic composition and not an infection of the human body to be treated.

Again, as previously urged, Hanke teaches a prophylaxis treatment particularly based on the use of nanoparticles to prevent discoloration of the skin. Accordingly, there is no suggestion to one skilled in the art to use the significantly larger particles in Bechert to provide a body care product such as a cream to treat infection. Such a conclusion may only be based on applicants' own teachings.

Reliance upon Hanke as generally showing prior art knowledge of the use of silver particles to provide antimicrobial properties is overcome by the Steinrücke Declaration. The claimed topical body care product to topically treat an infection is particularly enabled by applicants' discovery that the particles are maintained on the skin surface and top layers of the stratum corneum whereby prior art nanoparticle problems are avoided. Moreover, the claimed porous particles provide sufficient silver ion activity to effectively topically treat infection. In accordance with these discoveries, the deficiencies of the Bechert inanimate application of particles and the prior art nanoparticle problems are overcome so as to enable the present invention.

The claimed topical body care products exhibit properties never suggested nor taught by the prior art. The amended claims emphasize the particle characteristics enabling the properties and specifically claim the same as a topical body care product effective to topically treat an infection. None of these properties were taught or suggested by the prior art, and the claims of record are thereby patentably distinguished.

In this regard, claim 72 has been amended to particularly emphasize the unexpected properties of the claimed particles by reciting a topical body care product wherein:

"the particles are sized and constructed to not penetrate through deeper skin layers whereby the particles effects are primarily restricted to the skin surface and the internal porosity of the particles enables sufficient antimicrobial effects as a topical medicament".

The foregoing claim amendment is particularly supported by the paragraph bridging pages 5 and 6 of the application. No prior art teachings suggest such a product or properties.

For all of the forgoing reasons, the rejection of the claims is overcome and final allowance of the claims is requested.

As noted above, claim 51 includes all of the limitations of claim 32 and is allowable over the prior art for the same reasons set forth above. Accordingly, rejoinder of claims 51-70 is respectfully requested.

For the reasons set forth above, claims 32 - 72 presently of record are in condition for allowance and such action is requested.

If there are any fees required by this amendment, please charge the same to Deposit Account No. 16-0820, Order No. WFG-39710.

Respectfully submitted,

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May 24, 2011